



Hands-on Lab: Create Db2 service instance and Get started with the Db2 console

Estimated time needed: 15 minutes

From now on, the hands-on labs for this course require an environment for working with a relational database. To get you up and running quickly we will do so on the Cloud, so you don't have to worry about downloading or installing anything, rather, simply access your database from your web browser. IBM Cloud provides a large number of Data and Analytics services, including IBM Db2, a next generation SQL database.



IBM Cloud

Objectives

After completing this lab, you will be able to:

- Use IBM cloud account to create and use resources
- Create an instance of a Db2 service
- Locate and explore the Db2 console

Pre-requisites

You will need an IBM Cloud account to do this lab. If you have not created one already, click on this [link](#) and follow the instructions to create an IBM Cloud account.

Task 1: Create an instance of IBM Db2 Lite plan

Now let us introduce you to Db2 on IBM Cloud. IBM Db2 is a next generation SQL database provisioned for you in the cloud. You can use Db2 on IBM Cloud just as you would use any database software (RDBMS), but without the overhead and expense of hardware setup or software installation and maintenance. Among the service plans offered for Db2 on IBM Cloud is the Lite plan, which is free to use. You can use your database instance to store relational data, analyze data using a built-in SQL editor, or by connecting your own apps.

Note that IBM Cloud also provides other variants of Db2 such as Db2 Hosted and Db2 Warehouse on Cloud, which is also referred to in this course. However, for the labs in this course, we will utilize the Db2 service since it comes with a Lite plan which is free to use.

Please follow the steps given below to provision an instance of Db2 on IBM Cloud.

1. Login to [IBM Cloud](#)
2. Go to [the DB2 Services page on IBM Catalog](#).

The screenshot shows the IBM Cloud Catalog interface. At the top, there's a search bar and navigation links like 'Catalog', 'Manage', and 'Shreya Khurana's Acco...'. Below the search bar, there's a grid of service cards. The 'Db2' card is highlighted with a red border. It features the Db2 logo, the text 'Db2 By IBM', a description: 'A fully managed, highly-performant relational data store running the enterprise-class Db2 database engine.', and a list of features: 'Lite • Free • EU Supported • HIPAA Enabled • IAM-enabled • IBM supported'.

3. Select a location where you want the service to be hosted.

Note: Depending on the Country of your IBM Cloud account, a location to deploy will be pre-selected. For example, if you are in the US, the default region will be Dallas. Users from the UK will see London and so on. Select either **DALLAS** or **LONDON** as the location. Make sure a **Region** is selected as the location, not a **Data center**.

The screenshot shows the IBM Cloud Catalog page for the 'Db2' service. The browser address bar shows 'cloud.ibm.com/catalog/services/db2' with a red box around it and a red '1' next to it. The page header includes 'Catalog / Services /' and the 'Db2' logo. Below the logo, it says 'Author: IBM • Date of last update: 09/21/2020 • Docs • API docs'. There are two tabs: 'Create' and 'About'. The 'Create' tab is active, showing a 'Select a region' dropdown menu. The dropdown menu is open, showing 'Select a region' and 'London' as an option.

4. Scroll down to the Pricing Plans section and select the **Lite plan** (it's a free plan, and available only in **DALLAS** and **LONDON** at this point of time) or any other plans as required.
5. Then click on the **Create** button towards the lower-right of the page. It will spin for a few seconds (typically less than 30s) and then you should see a Service Created message indicating that your instance of Db2 was created successfully.

Plan	Features	Pricing
Lite ²	200 MB of data storage 15 simultaneous connections Shared multitenant system	Free
<p>The Free plan provides a free Db2 service for development and evaluation. The plan has a set amount of resources shown. You can continue using the free plan for as long as needed, however, users are asked to re-extend their account every 90 days by email. If you do not re-extend, your free account is cleaned out a further 90 days later to help provide free resources for everyone.</p> <p>Lite plan services are deleted after 30 days of inactivity.</p>		

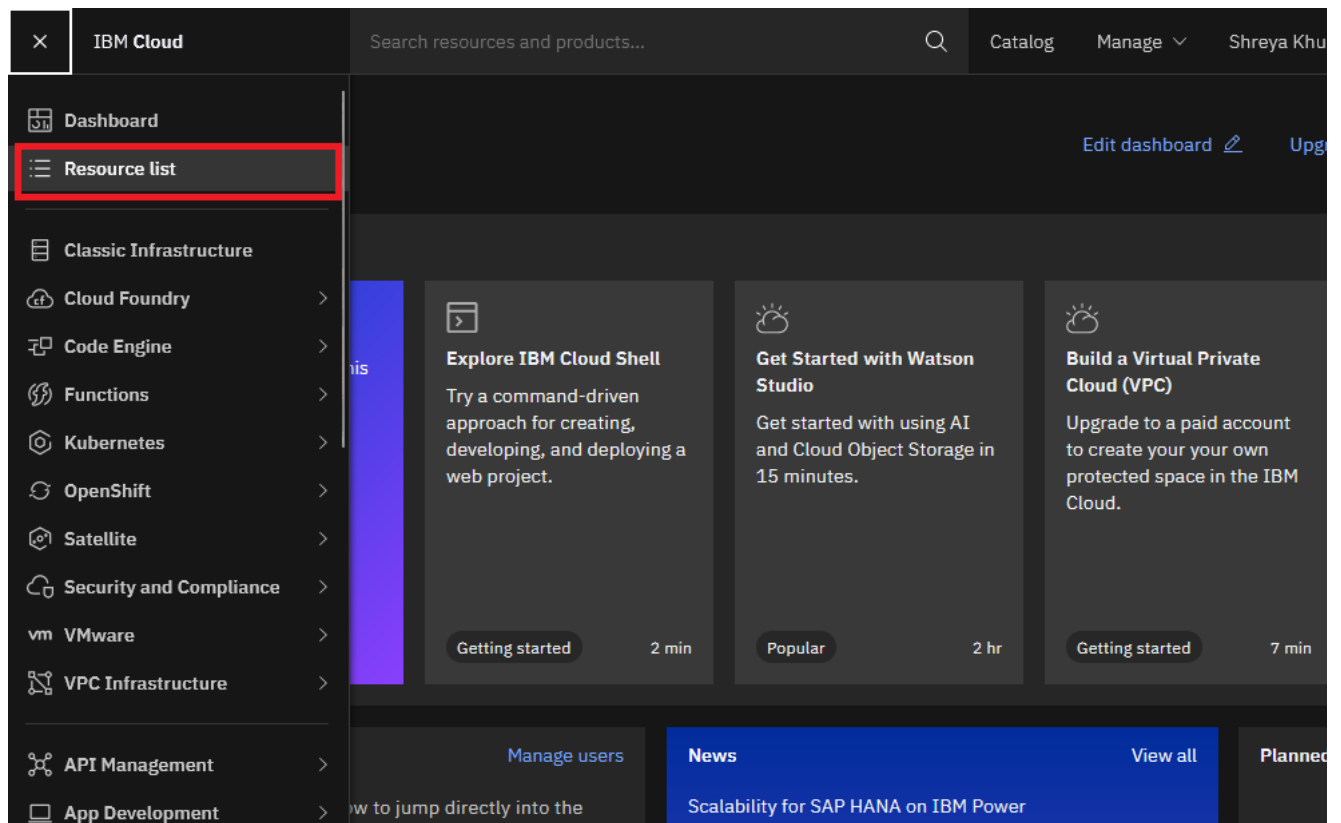
Task 2: Locate and Explore the Db2 console

Now that you have created your database instance, you need to know how to get to it, explore the console and start working with it.

- **NOTE:** You are not required to compose and run any SQL query on this exercise.

1. To access your database instance, go to your IBM Cloud Resource List (you may need to log into IBM Cloud in the process) directly at: cloud.ibm.com/resources

- **Alternative:** Go to your IBM Cloud account (you may need to login to IBM Cloud in the process) at: cloud.ibm.com and click **Resource List**.



2. In the Resource list, expand the **Databases** heading and locate and click on your instance of Db2 you provisioned in exercise 2 (the name typically starts with Db2-xx for example Db2-fk, Db2-50, etc.)

	Name	Group	Location	Product	Status
	Filter by name or IP address...	Filter by group or org...	Filter...	Filter...	
	Storage (1+)				
	AI / Machine Learning (4+)				
	Analytics (0)				
	Blockchain (0)				
	Databases (1)				
	Db2-pg	Default	London	Db2	Active
	Developer tools (0+)				
	Logging and monitoring (0)				
	Migration (0)				
	Integration (0+)				
	Internet of Things (0)				
	Security (0)				

3. Click on the **Go to UI** button.

Resource list /

Db2-pr Active Add tags

Manage

Getting started

Service credentials

Connections

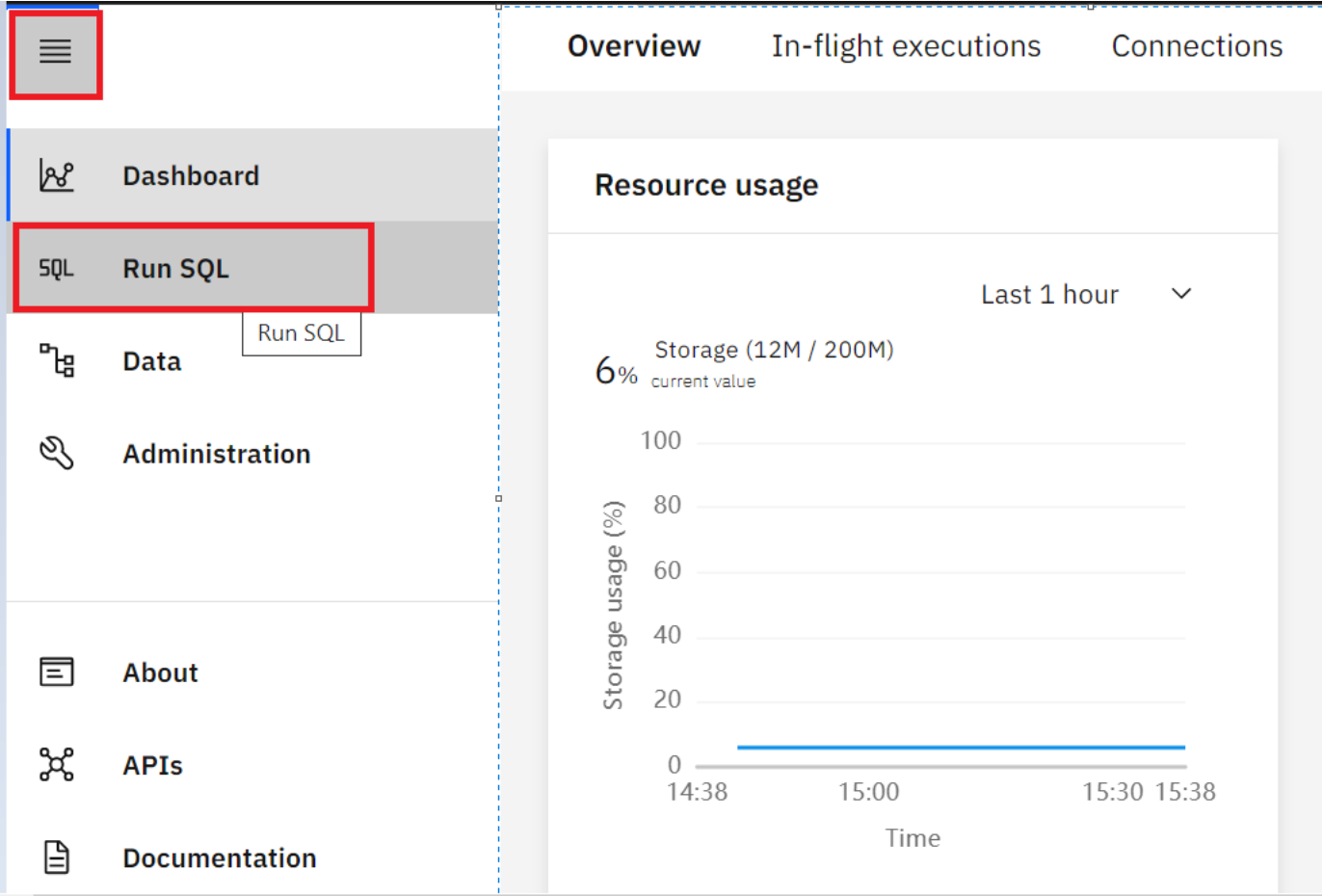
Getting started

Where can I find my credentials?
Get your username and password by clicking the "Service Credentials" link to the left and selecting "New Credentials"

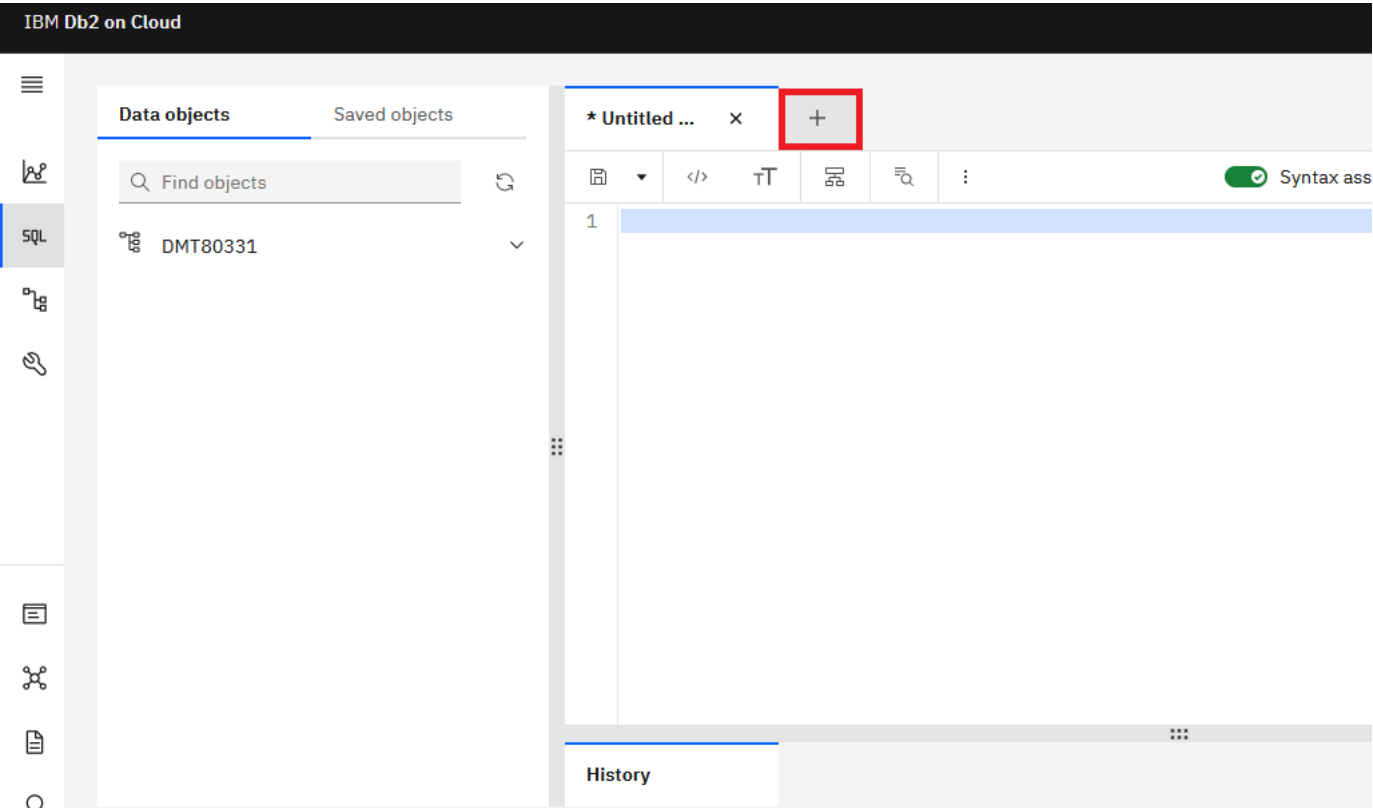
Go to UI

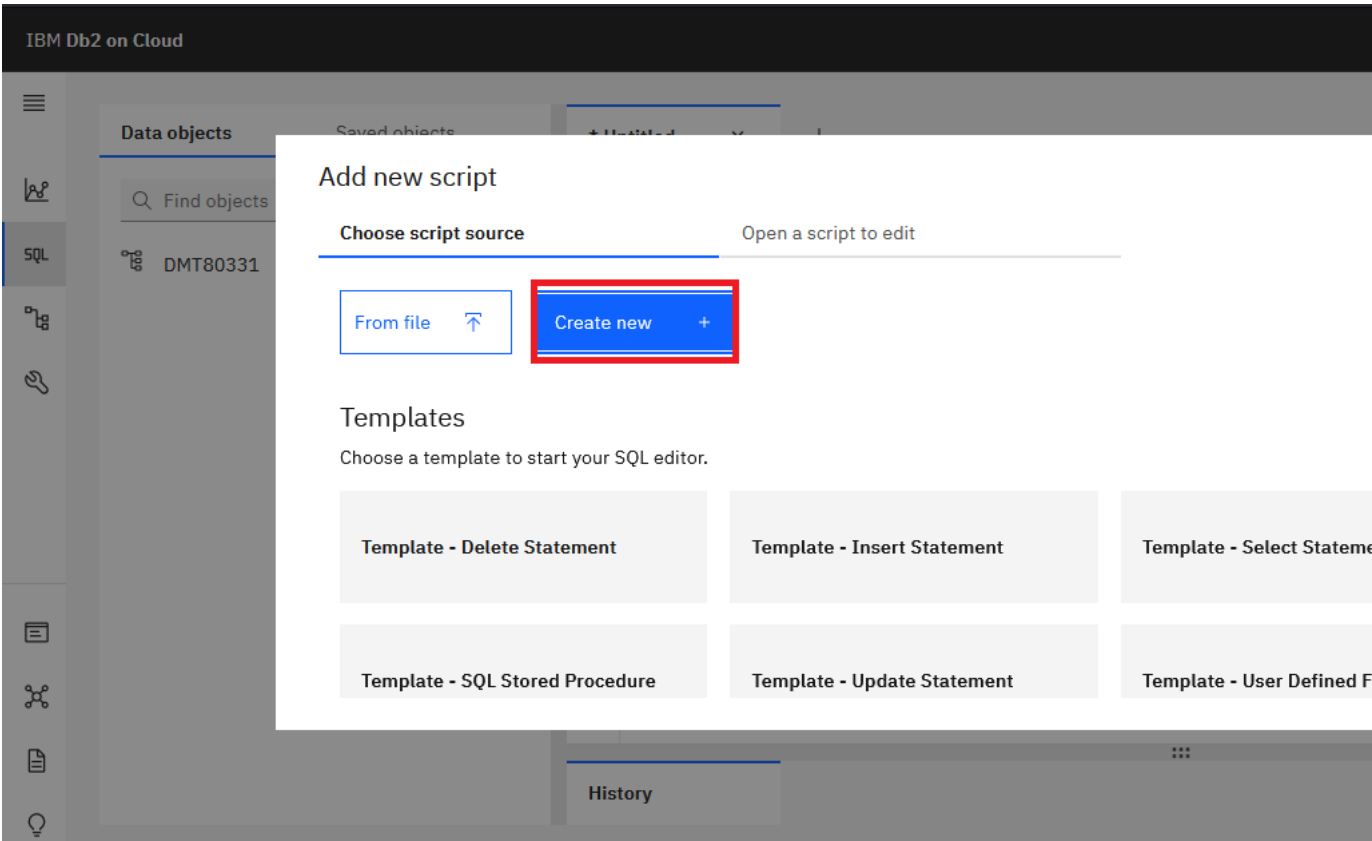
Getting started docs

4. The Db2 console will open in a new tab in your web browser. Click on the 3-bar menu icon in the top left corner and then click on **RUN SQL**.

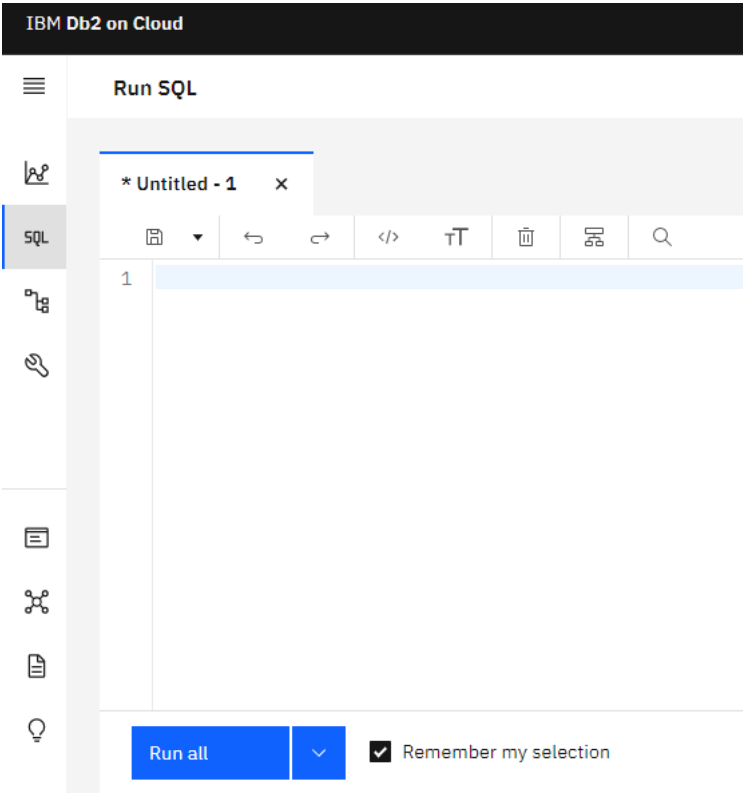


5. On the next screen click on the + button and then click on **Create new**.





6. The SQL editor will open where you can start typing and running queries.



7. The SQL editor has several areas for performing different tasks.

The screenshot shows the IBM Db2 on Cloud interface. At the top, there's a header "IBM Db2 on Cloud". Below it, a sidebar on the left contains icons for various functions. The main area is divided into two sections. The top section is a SQL script editor with a tab labeled "*Untitled ...". It contains a single line of SQL code: `SELECT * FROM BILLING_TEST;`. A red arrow points to this line with a text box that says "INSERT YOUR SQL QUERIES HERE". The bottom section is a "History" table with columns "Script", "Date", and "Status". It shows one entry: "Untitled - 1" with a date of "Mar 15, 2023 12:19:58 PM" and a status of "1" with a green checkmark. A red arrow points to this green checkmark with a text box that says "GREEN MARK INDICATES SUCCESS".

Script	Date	Status
Untitled - 1	Mar 15, 2023 12:19:58 PM	✓ 1

8. Click on the + icon if you want to add a new script for composing queries and then select **Create new**.

The screenshot shows the IBM Db2 on Cloud interface. In the top section, the SQL script editor has a tab labeled "*Untitled ...". A red box highlights a "+" icon and a button labeled "Add new script". The bottom section shows the "History" table with the same entry as before.

9. When you are asked in the upcoming labs, compose the appropriate SQL query for each problem and run by clicking **Run all**.

10. When you will run the script, by looking at the History section of the executed queries you will know whether the SQL statements ran successfully or not.

The screenshot shows the IBM Db2 on Cloud interface. The "History" section is active, showing a table with columns "Script", "Date", "Status", and "Run". It contains three entries. The first entry is "Untitled - 1" with a date of "Mar 14, 2023 6:32:56 PM" and a status of "2" with a green checkmark. The second entry is "INSERT INTO BILLING_TEST VALUES(101, 'CLOTHES', 'INDIA', 'FASHION', 'MARCH', '2000')". The third entry is "SELECT * FROM BILLING_TEST" with a status of "1" and a green checkmark. A red box highlights the third entry.

Script	Date	Status	Run
Untitled - 1	Mar 14, 2023 6:32:56 PM	✓ 2	0.1
INSERT INTO BILLING_TEST VALUES(101, 'CLOTHES', 'INDIA', 'FASHION', 'MARCH', '2000')		✓	0.1
SELECT * FROM BILLING_TEST		✓	0.1

11. By clicking on each of the executed queries in the History section, you can see the result of that query. If the query has failed, you can see the error details.

The screenshot shows the IBM Db2 on Cloud interface. The "Results" section is active, showing a table with columns "CUSTOMERID", "CATEGORY", "COUNTRY", "INDUSTRY", "MONTH", and "B". It contains one entry: "101", "CLOTHES", "INDIA", "FASHION", "MARCH", "2".

CUSTOMERID	CATEGORY	COUNTRY	INDUSTRY	MONTH	B
101	CLOTHES	INDIA	FASHION	MARCH	2

Summary

Congratulations! You have completed this lab, and you are ready for the next topic.

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Changelog

Date	Version	Changed by	Change Description
15-03-2023	2.7	Shreya Khurana	Updated screenshots and instructions
16-02-2023	2.6	Shreya Khurana	Updated screenshots
23-08-2022	2.5	Appalabhaktula Hema	Updated instructions
11-05-2022	2.4	Hema	Updated instruction
28-04-2022	2.3	Hema	Updated screenshots
08-07-2021	2.2	Malika	Updated screenshots
23-12-2020	2.1	Steve Ryan	ID Review
07-12-2020	2.0	Sandip Saha Joy	Created revised version from DB0201EN
06-03-2020	1.0	Rav Ahuja	Created initial version

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